

GLOSSARY

Accuracy - The combination of bias and precision of an analytical procedure which reflects the closeness of a measured value to a true value.

Baseflow - The dry-weather flow occurring in a drainage system, with no apparent source. Likely to be mostly infiltrating groundwaters in a sanitary or storm drainage system, but can also be contaminated with illicit wastewaters. See constant (or continual) dry-weather flow.

Batch dump - The disposal of a large volume of waste material during a short period of time. Usually an industrial waste.

Bias - A consistent deviation of measured values from the true value, caused by systematic errors in a procedure.

Coefficient of Variation (COV) - A measure of the spread of data (ratio of the standard deviation to the mean).

Combined Sewer - A sewer designed for receiving surface (dry- and wet-weather) runoff, municipal (sanitary and industrial) wastewater, and subsurface waters from infiltration. During dry weather, it acts as a sanitary sewer, but it also carries stormwater from wet-weather runoff.

Combined sewer overflow (CSO) - Flow from an outfall (discharge conduit) of a combined sewer collection system, in excess of the interceptor capacity or due to a malfunctioning or improperly set flow regulator, that is discharged into a receiving water and/or an auxiliary CSO control storage-treatment system.

Constant (or continual) dry-weather flow - Uninterrupted flow in a storm sewer or drainage ditch occurring in the absence of rain. See baseflow.

Deposits and stains - Any type of coating or discoloration that remains at an outfall as result of dry-weather discharges.

Detection limit - A number of different detection limits have been defined: IDL (instrument detection limit), is the constituent concentration that produces a signal greater than five times the signal to noise ratio of the instrument; MDL (method detection limit) is the constituent concentration that, when processed through a complete method, produces a signal with a 99 percent probability that it is different from a blank; PQL (practical quantification limit) is the lowest constituent concentration achievable among laboratories within specified limits during routine laboratory operations. The ratios of these limits are approximately: IDL:MDL:PQL = 1:4:20 (APHA, et al. 1989).

Direct (dry-weather) entries into the storm drainage system - Sources which enter a storm drainage system directly, usually by direct piping connections between the wastewater conduit and the storm drain.

Domestic sanitary wastewater - Sewage derived principally from human sources.

Drainage area - The area of land from which a storm drainage system collects precipitation and storm runoff and then delivers the resulting stormwater to a specific point.

Dry-weather flow - Flow in a storm sewer or drainage ditch occurring in the absence of storm flow. But it is also a constituent of wet-weather flow. See baseflow.

Entries to storm drainage - Water (relatively clean or polluted) discharged into a stormwater drain from sources such as, but not limited to, direct industrial or sanitary wastewater connections, roof leaders, yard and area drains, cooling water connections, manhole covers, groundwater or subterranean stormwater infiltration, etc.

Floatables - Floating materials, (plastic containers, condoms, sanitary napkins, tissues, corks, paper containers, wood, leaves, oil films, slimes, scum, etc.), that are either part of the inappropriate waste streams discharged to a stormwater system, or collected by flows which enter a stormwater drainage system.

Geographic Information System (GIS) - Computer software that maps land areas and produces images and information relating to the land area, e.g., topography, drainage, public utilities, roads, buildings, industry, land use, and demography.

Groundwater infiltration - Seepage of below water table groundwater and subterranean stormwater into stormwater, sanitary wastewater, or combined sewer drainage systems, through such means as defective pipes, pipe joints, connections, or manhole walls.

Hardness - Caused by the presence of the divalent cations (principally calcium and magnesium) in water. Causes an increased amount of soap usage before producing a lather and scale to form in hot water pipes, boiler vessels, condensate return lines, cooling systems, kettles, etc.

House Lateral - A pipe connecting a house to a lateral or other sewerline. Also called a service connection.

Indirect dry-weather entries into the storm drainage system - Non-stormwater sources which enter a storm drainage system indirectly, usually by floor, areaway, and yard drains or inlets; and spills and dumping.

Industrial dry-weather entries into the storm drainage system - Any solid or liquid waste coming from industrial sources which enter storm drainage systems during periods of dry weather.

Infiltration - The process whereby water enters a drainage system underground through such means as defective pipes, pipe joints, connections, manhole walls, etc.

Inflow - The process whereby water enters a sanitary wastewater drainage system from surface locations, (e.g., through depressed manhole covers, yard and areaway inlets, roof leader setc.).

Intercepted stormwater/groundwater - The portion of surface runoff or groundwater moving through the soil that enters a storm drainage, combined sewer, or sanitary sewer system.

Interceptor - A sewer that receives flows from a number of wastewater trunk lines.

Intermittent dry-weather flow - Irregular flow in a storm drainage system occurring in the absence of storm flow.

Lateral - A drain or sewer that has no other drains or sewers discharging into it, except for service connections, or house laterals.

Leaching field - A system which facilitates the infiltration of a septic tank effluent into the soil. This is typically done by a pipe and infiltrating trench system which takes the effluent from a septic tank and distributes it through the leaching field, where additional treatment of the effluent occurs as it percolates through the ground or soil column.

Monte Carlo probabilistic simulation - A statistical modeling approach used to determine the expected frequency and magnitude of an output by running repetitive simulations using statistically selected inputs for the model parameters.

Municipal sewage/wastewater - Sewage/wastewater from a community which may be composed of domestic sewage/wastewater, industrial wastewater and/or commercial wastewater, together with subsurface infiltration.

National Pollution Discharge Elimination System (NPDES) - A national system of permits issued to industrial, commercial, and municipal dischargers to limit the amount of pollutants that can be discharged to waters of the USA.

Non-contact cooling water - Water that decreases the temperature of an object, without ever physically contacting the object.

Nonpoint pollution source- Any unconfined and nondiscrete conveyance from which pollutants are discharged, or an urban drainage system not under the NPDES. These sources are usually from agricultural, silvicultural, and rural land areas..

Outfall - In this User's Guide, an outfall refers to a point at which a stormwater drainage system discharges to a receiving water. There is sometimes a concrete structure or retaining wall at this location to protect the end of the discharge pipe and prevent erosion of the receiving water bank.

Pathogen - A disease-causing microorganism.

Point source - Any discernible, confined, and discrete conveyance from which pollutants are, or may be, discharged. Under the NPDES it is an outfall discharge, or overflow of treated or untreated sanitary, industrial, combined sewage, or stormwater (from a municipality greater than 100,000 in population).

Pollutant - Any material in water or wastewater interfering with designated beneficial uses.

Potable water - Water that has been treated, or is naturally fit for drinking, i.e., the water has no harmful contents to make it unsuitable for human consumption.

Precision - The measure of the degree of agreement among replicate analyses of a sample, usually expressed as the standard deviation.

Pretreatment - The removal of material such as, gross solids, grit, grease, metals, toxicants. etc. or treatment such as aeration, pH adjustment, etc. to improve the quality of a wastewater prior to discharge to a municipal wastewater system. This is usually done by the industrial user of the water, but can also refer to the initial treatment processes of a sewage treatment plant.

Process line discharge - The disposal of anything used in, or resulting from, a manufacturing process.

Process water - Water used in industry to perform a variety of functions, or as an actual product ingredient.

Receiving waters - Natural or man-made water systems into which stormwaters, or wastewaters, are discharged.

Rinse water - Water that cleans or reduces the temperature of an object through actual physical contact with the object.

Sanitary sewer - A sanitary wastewater drainage system intended to carry wastewaters from residences, commercial buildings, industrial plants, and institutions together with minor quantities of groundwater, stormwater and surface water that are not admitted intentionally [40 CFR 35.2005 (b) (37)].

Sanitary wastewater - Wastewater of human origin.

Service Connection - See house lateral

Septic tank - A tank which receives sanitary wastewater direct from its source, (usually residential), and permits settling of the heavy solids and floatation of greases and fats along with anaerobic digestion. Septic tanks, typically need to meet minimum regulatory standards, e.g., minimum volume and detention time.

Sewage - In this text the term "sewage" refers to sanitary wastewater or wastewaters generated from commercial or industrial operations, it does not include stormwater.

Sewer - A pipe, conduit or drain generally closed, but normally not flowing full, for carrying sanitary, industrial and commercial wastewater and storm-induced (combined wastewater and stormwater) flows.

Sewerage - System of piping and appurtenances, with and without control-treatment facilities for collecting and conveying wastewaters with or without pollution abatement from source to discharge.

Specific Conductivity - Expressed in microSiemens/cm (or micromhos/cm). It is an indication of the dissolved solids (charged) concentration in a liquid.

Storm drainage discharge - Flow from a storm drain that is discharged to a receiving water.

Storm drain - A pipe, or natural or man-made channel, or ditch, that is designed to carry only stormwater, surface runoff, street washwaters, and drainage from source to point of discharge [40 CFR 35.2005 (b) (47)].

Stormwater - Water resulting from precipitation which either infiltrates into the ground, impounds/puddles, and/or runs freely from the surface, or is captured by storm drainage, a combined sewer, and to a limited degree, by sanitary sewer facilities. See urban runoff and urban stormwater runoff.

Surfactants - Surface-active agents and common components in detergents which affect the surface tension of water and can cause foaming.

SIC - Standard Industrial Classification, a code used to describe an industry.

Total solids - The entire quantity of solids in the liquid flow or volume including the dissolved and particulate (suspended, floatable, and settleable) fractions.

Toxicity - The degree to which a pollutant causes physiological harm to the health of an organism.

Tracer - In this User's Guide, a tracer is a distinct component, or combination of components ("fingerprint"), of a polluting source which is identified in order to confirm the entry of the polluting source to a storm drainage system.

Trace Metals - Metals present in small concentrations. From a regulatory standpoint, this usually refers to metal concentrations that can cause toxicity at trace concentrations.

Turbidity - The lack of clarity in the water usually caused by suspended particulate matter and measured by interference to light penetration.

Urban runoff - Any runoff stormwater from an urban drainage area that reaches a receiving water body or subsurface. During dry weather, it may be comprised of many baseflow components, both relatively uncontaminated and contaminated. See stormwater and urban stormwater runoff.

Urban stormwater runoff - Stormwater from an urban drainage area that reaches a receiving water body or subsurface caused by weather precipitation (rain, snow, etc.). See stormwater and urban runoff.

Watershed - A geographic region (area of land) within which precipitation drains into a particular river, drainage system or body of water that has one specific delivery point.

Wet-weather flow - Any flow resulting from precipitation (rain, snow, etc.) which may introduce contaminants into storm drainage combined sewerage, or sanitary sewerage systems.